



NEPTUNE ENERGY
GERMANY
2023 ESG REPORT



With a presence in the country for more than 130 years, Neptune Energy operates and develops gas and oil fields in the northwest, east and south of Germany.

The company's main assets are concentrated in the North German basin, the Altmark and the Rhine Valley, with a diverse gas and liquid production portfolio including fields at various stages of the cycle. With the Römerberg oil field and the Adorf gas field under development, Neptune Energy operates two of the most promising E&P projects within the country.

Neptune Energy supplies 16% of Germany's natural gas and 16% of its produced oil, making the company the No. 3 oil and gas producer in the country.

ENVIRONMENT

We support the goals of the Paris Agreement and net zero targets set by governments around the world. While these goals look to 2050, we are focusing on what we can do in the short to medium term, recognising that actions in the next 10 years will be crucial in curbing global temperature rises.

Neptune purchases green energy certificates for all assets, but one – Thüringen, and all calculations are done using market based method. In compliance with the GHG Protocol, in the report we present both location and market based method Scope 2 calculations for comparison.

Carbon intensity

Our carbon intensity in 2023 was 14.1 kg CO₂/boe (around 6.5% lower than the International Association of Oil & Gas Producers (IOGP) global industry average). As a result of many carbon reduction projects around all the assets and purchased green energy certificates, carbon intensity is systematically decreasing.

Methane intensity

Reducing methane emissions is recognised as one of the most effective ways of limiting near-term climate change. This is because, although short-lived in the atmosphere, methane is a potent greenhouse gas, retaining more than 80 times more heat than CO₂ in a 20-year timeframe.

Our methane intensity, which refers to methane emissions from our operated assets as a percentage of gas exported, was 0.01% in 2023. The Oil and Gas Climate Initiative global industry average is 0.15%.

Energy efficiency and emissions reduction

We are committed to energy efficiency and emissions reduction, and our operations are certified to the ISO 50001 energy management standard.

Due to the carve-out of Neptune's business in Germany, all energy efficiency and emissions reduction projects were put on hold.

Lithium and geothermal

A permit for lithium production in the Saxony-Anhalt region is expected to be granted in March 2024. This will position Neptune as the first company in Germany with a lithium production license. Additionally, alongside pilot tests onsite planned in 2024, we are continuing to work on applications for three exploration licenses (granted for five years).

We are also in discussions with a potential strategic partner to explore the potential for geothermal energy projects in three areas in Germany. We are utilizing subsurface data from exploration and our know-how that we gained during decades of operating oil and gas fields.

Greenhouse gas emissions and energy ¹	2023
Direct GHG emissions (Scope 1) (tCO ₂ e)	92,476
Indirect GHG emissions (Scope 2) – market based ² (tCO ₂ e)	36
Indirect GHG emissions (Scope 2) – location based ³ (tCO ₂ e)	10,612
Total scope 1 and 2 emissions (tCO ₂ e)	92,513
Energy consumption (MWh)	425,591
Reductions in energy consumption as a result of energy efficiency initiatives (MWh)	0
Carbon intensity (kg CO ₂ /boe) ^{4,5,6}	14.1
Methane intensity (%)	0.01
Emissions from use of sold product (Scope 3) (MtCO ₂ e)	1.99

¹ We report our GHG emissions and energy consumption data on an operational control basis. Our calculation methodology follows the IPIECA/API/IOGP Petroleum Industry Guidelines for Reporting GHG Emissions. EY has provided limited independent assurance over the metrics highlighted in grey in the GHG and energy use performance table above.

² Scope 2 market based calculations use supplier specific emission factors where supplier specific data in the form of contractual agreements is available.

³ Emission factors for calculating purchased energy emissions using the location based methodology for Germany are supplied by IEA (IEA emission factors 2023).

⁴ This includes Scope 1 and 2 emissions related to production/operations. We calculate intensity using wellhead production, in line with the IPIECA/API/IOGP Petroleum Industry Guidelines for Reporting GHG Emissions.

⁵ Carbon intensity is calculated using Scope 2 market based emissions.

⁶ Carbon intensity is calculated using CO₂ emissions only.

Other air emissions	2023
Air emissions – nitrogen oxides (tonnes)	51
Air emissions – sulphur oxides (tonnes)	16
Air emissions – non-methane VOCs (tonnes)	59

Water

Water is an essential resource, and we are committed to using it efficiently and minimising our consumption.

We identify water-related impacts as part of our environmental impact assessments. We recognise that managing freshwater use is particularly important in areas of water stress. Based on analysis using the World Resources Institute Aqueduct Water Risk Atlas, none of our major operated assets* were located in areas of high water stress in 2023.

We use non-fresh water from our wells at some of our sites to reduce the amount of water we require from municipal supplies.

We are committed to monitoring and reducing hazardous contaminants in discharges to water. To minimise adverse effects on the environment, we treat produced water prior to discharging.

Biodiversity

We participate in restoration projects and enhance biodiversity in areas where we work. We have long-standing partnerships with the nature conservation foundations of the districts of Emsland and Grafschaft Bentheim.

Our environmental impact assessments include reviewing whether a site will be located close to or within a protected area. We seek first to avoid and then minimise, restore, and offset any potential impact with appropriate site selection, project design and scheduling. We monitor our impact throughout the operation's lifespan.

In total, 11 of our major operated assets* are located within areas of high biodiversity value. We report locations that are designated protected, Ramsar, Natura 2000, IUCN I-IV, World Heritage sites, MAB, regional and national sites.

Water and biodiversity	2023
Water consumption (m ³)	29,319
Operations in areas of water stress	0
Operations and projects within areas of high biodiversity value (number)	11

*Major operated sites are sites producing over 250 boe/day.

Decommissioning

We consider environmental factors when decommissioning and closing a site. When decommissioning wells, we fill them in and dismantle the extraction and processing equipment. Well sites are cleared and refilled with topsoil to return the land to its original condition.

In 2023, we supported the planting of new trees in the area of our Schneeren gas field, in cooperation with the local heritage association.

Waste data

Waste	2023
Total waste (tonnes)	49,447
Total hazardous waste (tonnes)	11,732
Total non-hazardous waste (tonnes)	37,715

SOCIAL

Our people

We support a just energy transition that delivers decent, safe work and quality jobs. We have a dynamic and inclusive culture, with 405 employees in 2023. We hold regular meetings with representatives of our works councils, which provide a formal setting for our employees to give feedback and raise concerns with senior management.

People	2023
Total employees (number)	405
Women (%)	17
Employee turnover (%)	4.86

Safety

In 2022/2023 we completed stage 1 of the ISO 45001 certification of our occupational health and safety management system with internal audits.

We do all we can to prevent incidents and have processes in place to enable the earliest detection and a prompt response to emergencies. We operate a four-tier management model for emergency response, which ensures Neptune delivers its duty of care, from an initial site incident to Board-level oversight.

We continue to strengthen our emergency response capabilities, using industry best practice as a guide. In 2023 we carried out several joint exercises across the company with local fire brigades to simulate the rescue and transportation of employees suffering from burns and respiratory injuries to ensure our teams are prepared for such emergencies.

Safety ²	2023
Total recordable injury rate (TRIR)	1.91
Lost time injury frequency rate (LTIF)	0.00
Process safety event rate (PSER)	0.48
Fatalities	0
Oil spills – number (≥ one barrel)	1

² TRIR is the number of recordable injuries (fatalities, lost work day cases, restricted work day cases and medical treatment cases) per one million hours worked. LTIF is the number of lost time injuries (fatalities and lost work day cases) per one million hours worked. PSER is the total number of tier 1, 2 and 3 process safety events per one million hours worked.

Community engagement

We build strong relationships with the communities where we work and consult with them throughout the different stages of our operations to understand their priorities and address their concerns. This enables us to generate value for local communities and contribute to their economic and social development.

We are committed to having open dialogue with local communities and host administrations and to ensuring there are channels for local communities to provide feedback. Our engagement is guided by our Code of Conduct, which sets out our expectations on community involvement.

We have a dedicated local stakeholder manager for each region where we operate. Stakeholders can also raise any concerns or questions via a telephone hotline or by email.

The majority of concerns raised in 2023 related to noise, transport and light during drilling operations as well as environmental issues. We are committed to addressing these concerns by informing local communities of timings well in advance of activities taking place.

We conduct site visits and participate in public consultations to inform the community about planned activities and hear their views. In 2023, for example, the local mayor in Twist visited our Rühlertwist oil field and talked to us about environmental conservation. As a result, we have supported a project that aims to restore a visitor platform for watching native bird species.

Society	2023
Community investment spend (€)	46,000

GOVERNANCE

Our Code of Conduct sets out our expectations and commitment to act with the highest degree of ethics and integrity. It contains five principles:

- Acting in accordance with law and regulations.
- Establishing a culture of integrity.
- Behaving fairly and honestly.
- Respecting others.
- Speaking up.

We are committed to acting with honesty and integrity in respect of tax laws and regulations. We disclose our payments to governments in line with German regulation and file our accounts, which include tax and royalties, to the German Company Register.